MARYLAND DEPARTMENT OF AGRICULTURE
FY 2005 BUDGET PRESENTATION
HOUSE APPROPRIATIONS COMMITTEE
TRANSPORTATION AND THE ENVIRONMENT SUBCOMMITTEE
JANUARY 27, 2003

The Department of Legislative Services (DLS) has recommended three specific budgetary reductions and a series of program updates and discussions. The Department's responses to the proposed reductions are presented first, followed by detailed program information.

1. FY04 Deficiency for Mosquito Control DLS Recommendation: reduce by $200,000
MDA works on a fiscal year appropriation, unfortunately, mosquitoes do not - they are a seasonal insect and their activity crosses our two fiscal years. We had record rainfall in 2003, we had West Nile Virus everywhere, people were sick, we had EEE, we had infected livestock, so we continued to spray for mosquitoes and worry about the budget in the winter. Due to the unusually wet summer of 2003 and the record number of cases of human and livestock illness, mosquito control spraying activities occurred at twice the normal level of activity. Nearly all of the FY04 funds allocated for employing contractual employees and purchasing insecticide were expended by the end of October, 2003. That is why we have a deficiency request. Without relief, we have only three options:

1. Have no Spring 2004 program for mosquito control
2. Reduce other agency programs by $700,000
3. Request additional resources

MDA reallocated funds ($250,000) for mosquito control in late FY03. However, it was necessary, even with the additional allocation of general funds, to overspend by $255,000. The FY 2004 general fund appropriation for mosquito control is 15% below FY03 general fund expenditures. This is simply due to the decision to delay the procurement of the airplane. And the impact of the $250,000 MDA added by budget amendment. Special fund revenue will be about $1,000,000, but 25% of this revenue is needed to balance the FY03 budget closing.

Funds remaining in the mosquito control program FY04 budget are not sufficient to meet normal program activities during the spring, 2004. A deficiency of $700,000 will provide the funds required to hire seasonal contractual employees, cover general and special fund shortages for permanent employee salaries, purchase sufficient insecticide to carry out normal mosquito control activities during the period of March through June, 2004 and purchase sufficient insecticide inventory to have adequate chemical stock on hand to begin FY 2005.

If $200,000 is deleted from the request for $700,000 of supplemental appropriation, as recommended by the legislative analyst, the Department will probably have to reduce insecticide purchases, decreasing the amount of mosquito larviciding next spring, reduce contractual employee hours and begin FY 2005 with near zero inventory of insecticide.

All of this assumes we have a "normal Spring season. If the weather is conducive to a larger than normal mosquito population, even the $700,000 won't be adequate. If the season is on the dry side, we obviously wouldn't require all of the deficiency funds. All we can do is base our estimates on the "normal" patterns.

<u>We would request that you reject the recommendation of the anaylst to reduce this deficiency request.</u>

2. Cover Crop **DLS Recommendation: Reduction of $214,440**

The Department disagrees with the proposed reduction of $214,440 to the cover crop cost share program. Cover crops have proven to be one the most cost effective practices at reducing nutrient losses from agriculture. An analysis requested in the 2002 Joint Chairmen's Report demonstrated cover crops to reduce the greatest amount of nitrogen from the Bay per dollar invested.

While highly efficient in reducing nutrients, cover crops are not cost effective for farmers in providing measurable economic return to the farm operation. As a result, cover crops are not widely accepted by the farm community without some form of subsidy or cost share assistance. While demand for cost share varies, based on program guidelines and benefits, farmers continue to be willing to adopt the practice, when funds are available. Statewide, farmers requests have exceeded $5.0 million dollars in prior years. Even when limited to the Eastern Shore, requests have exceeded $3.5 million.

University of Maryland research has demonstrated that the most significant phosphorus losses from farm fields occur as particulate phosphorus associated with soil erosion. While the cover crop program on the Eastern Shore focused on the practice's capacity to trap nitrogen, traditional application of the practice have been based on erosion control, keeping productive soils on the field, and reducing phosphorus losses by managing soil loss.

New 2000 Chesapeake Bay Agreement goals which include new targets related to reducing sediment loads to the Bay suggest that we should not be limiting cover crops to the Eastern Shore, but continue to support their implementation statewide. The combined benefits of nitrogen and phosphorus reduction, varying by geographic region, suggest that cover crops should be one of our highest cost share priorities.

MDA requests that you reject the recommendation of the analyst to reduce the appropriation for the FY05 Cover Crop Program

3. **Rural Maryland Council DLS Recommendation: reduce by $146,392 (MAERDAF)**

The DLS has recommended that an appropriation for the Maryland Agricultural Education and Rural Development Assistance Fund (MAERDAF) in the amount of $146,392 be cut from the FY 2005 Budget. We respectfully urge the Subcommittee to reject this recommendation.

The MAERDAF program was established in 2000 to offer important financial support to rural-serving nonprofit organizations that promote statewide and regional planning, economic and community development, and agricultural and forestry education efforts. In addition, the MAERDAF program was designed to provide targeted financial assistance to community colleges that support small and agricultural businesses through enhanced training and technical assistance offerings.

The MAERDAF program was born out of the frustration experienced by a number of rural-serving nonprofit organizations and community colleges in their ability to access adequate much needed programmatic or special projects funding. Unlike their counterparts operating in or near the urban centers, nonprofits operating in rural communities typically lack access to the plethora of corporate and private foundation philanthropic opportunities that are more readily available in metropolitan areas. Moreover, given the economic distress found in the rural regions of the State, it is not surprising to find that the area local governments to do not have the financial wherewithal to fully address these important developmental needs. Consequently, a serious resource deficit exists where the need, in many instances, is greatest.

The MAERDAF program was initially funded at a level of $422,000. For FY 2003, the General Assembly reduced the MAERDAF appropriation to $347,000. Last year, cost containment efforts resulted in the final MAERDAF appropriation amounting to $146,392, the same amount the Governor is recommending for FY 2005.

Program Structure and Impact

The MAERDAF program is a multi-agency effort coordinated by the Rural Maryland Council. Grant requests are made on a competitive basis by rural-serving entities (i.e., qualified 501(C)(3) nonprofit organizations and community colleges) to an interagency grants selection board consisting of representatives from MDA, DBED, DHCD, DHMH, DNR, and the Council. In making grant awards, the MAERDAF Board is required to give preference to organizations that leverage non-state matching funds, and many grantees in the past have had matches exceeding 100%. All grants awarded during the last four years have been in amounts of less than $50,000, and until this year most averaged about $20,000. For 2004, 13 grants were awarded with an average amount of just over $10,000. The Council is currently assisted by MDA, DBED and DHCD with the administration of individual grants awards.

During the four-year life of the MAERDAF program, some 61 grants, totaling $1,251,012, have been awarded to deserving programs in four basic rural improvement areas. Listed below are the cumulative numbers and amounts of MAERDAF program grants that have been allocated for each focus area over the last four years:

- 31 grants totaling $582,000 have been awarded for agribusiness development or agricultural and forestry education.

- 10 grants totaling $189,320 have been awarded for rural economic development (non-agricultural).

- 14 grants totaling $306,900 have been awarded for infrastructure and community development.

- 6 grants totaling $172,792 have been awarded for rural health care access improvement.

Concluding Comment

The MAERDAF Program has helped many rural-serving organizations establish or continue programs and projects that have had a significant and positive impact on Rural Maryland. In addition, the modest State investment in MAERDAF has helped the nonprofit sector in Maryland to leverage a substantial amount of private and federal financial support. Moreover, MAERDAF has helped many of these nonprofit service providers develop institutional capacity, improve grant-writing skills, and enhance the internal development of volunteer boards and staff.

In summary, the modest State investment of $146,392 in the MAERDAF program is well worth keeping, even in these difficult economic times. While the program could obviously be more effective if full funding were restored, the MAERDAF program can reasonably be expected to help a dozen or more rural-serving entities in FY 2005. Accordingly, we respectfully request that the Subcommittee reject the DLS recommendation and spare the MAERDAF program from further reductions in FY 2005.

Program Issues Raised by the Department of Legislative Services

DLS has requested MDA provide the committee with information and program updates on the following subject areas:

1. Water Quality Improvement Act Implementation and Enforcement
2. Mosquito Control Efforts, need for additional airplane, new local government funding
3. Governor's Poultry Industry Initiative
4. Human and Environmental Impacts of Arsenic in chicken litter
5. 2003 oyster and crab season - impact on seafood sales performance measures

1. WATER QUALITY IMPROVEMENT ACT of 1998 (WQIA)

Background

In an effort to address concerns raised about the (WQIA) and issues related to its implementation, the Governor directed the Department to host a Nutrient Management Summit to provide input and direction to improve Maryland's Nutrient Management Program. Over 300 participants attended the Summit held August 5, 2003 at Chesapeake College in Wye Mills, MD. Facilitated discussions on major topic areas generated an array of ideas which were honed into specific recommendations. At the end of the day, participants provided feedback on their relative degree of support for specific recommendations. The tone of the Summit and analysis of the output suggests strong support for nutrient management planning as a practice, but specific adjustments are necessary to improve the effectiveness of our current program. The changes being proposed do not change the scope of the current law but seek to improve the level of compliance with program requirements.

Improving Water Quality Improvement Act Implementation

Using input from the Summit, along with our program experience, the Department is proposing a series of modifications to the nutrient management program aimed at improving the level of implementation by farmers. Certain changes require legislation, which is being introduced as part of the Administration's legislative package. The bill will remove the requirement for farmers to sign, granting the state a right of entry to evaluate plan implementation. The Department will retain its ability to access farms to evaluate farm records related to the plan. The Department believes the right of entry issue to be the primary hurdle to further compliance and that, by addressing this issue, the majority of those farms currently out of compliance will participate in the program.

Other changes include the timing of material to be submitted to the Department related to the plan. The Department proposes to shift to a "post season" approach where certain summary information about the farm and the implementation of the plan would be submitted by the farmer at the end of season. This adjustment addresses concerns about the modifications to the plan required when the farmer is required to make certain changes to his operation after the plan is developed.

In certain situations, adequate technical standards required for plan development may not exist. Current law requires plans to be developed according to standards of the University of Maryland. The proposal allows MDA to consider other scientifically validated standards for use in the development of a plan.

MDA is interested in enhancing the resources available to develop nutrient management plans. Our initiative includes expanded opportunities for farmers to write their own plans, focusing consultant certification on specific types of operations, and increasing private sector consultant involvement by contracting directly with consultants for planning services.

Enforcement Strategies

The Department has noted a slowing in the rate at which additional farm operations are seeking to meet the requirements of the nutrient management program. We attribute this lag to the anticipation of the Nutrient Management Summit and potential changes to regulatory requirements. During this period of transition, MDA believes it would be ineffective and inappropriate to enforce requirements which are in a state of flux. Likewise, farmers may be reluctant to make certain investments to meet requirements they expect to change.

The Department continues to provide educational and technical outreach to farmers to assist in meeting program requirements. With the future direction of the program more clearly defined, the Department can prepare to assist farmers in meeting revised requirements. Once legislation is passed, the promulgation of regulations would be expected complete when the bill becomes effective on October 1, 2004. The Department feels it appropriate to focus initial compliance/enforcement efforts on those operations which have made no effort to meet the requirements of the program. After providing some window of opportunity for these farmers to take initial steps to get a plan, the Department would initiate enforcement actions on those operations remaining out of compliance after January 1, 2005

In addition to the penalties prescribed in the Water Quality Improvement Act, the Department intends to immediately implement cross-compliance requirements with our cost share programs. A farm operation must be in compliance with nutrient management requirements in order to be eligible for any of the cost share programs administered by MDA.

Cost Effectiveness of Cost Sharing Private Sector Plan Development vs. Development by University of Maryland Extension Staff

Historically, the University Extension system has been a means to transfer the latest technological advancements to farmers. Through Extension, farmers have been able to demonstrate new, more efficient farm production and management practices, integrating these innovations into their operations. The University of Maryland partnered with MDA in the development of Maryland's Nutrient Management Program in 1989. The University was able to demonstrate cost effective use of the first nutrient management plans, especially on those farms managing animal manures.

With the advent of the certification program to assure quality in meeting planning standards, the private sector played an increasing role in the development of nutrient management plans. It

soon became evident that the private sector was less inclined to serve animal operations, and was primarily developing plans for farmers using only commercial fertilizer for their crops. As a result, Extension consultants were directed toward the under-served animal operations. In certain situations, the private sector may be better equipped to address certain types of operations. In the nursery and greenhouse sector, private consultants have been addressing the majority of planning needs.

While cost effectiveness should always be a consideration in applying program resources, there are other factors related to nutrient management plan development which must be considered. Existing relationships between farmers and service providers afford opportunities for plan development. Farmers seek and receive professional guidance from a variety of sources which vary from farm to farm. Program resources should be available to support multiple systems or outlets for plan development and provide farmers with greater flexibility.

Reporting Requirements

There are existing reporting requirements established in the Agriculture Article related to nutrient management program implementation. In §8-804, the Nutrient Management Advisory Committee is required to report annually on the progress in implementing the Water Quality Improvement Act. This report to the Governor and the General Assembly, due each year on July 1, includes information on the level of participation in the nutrient management program, additional resources that may be required, the effectiveness of nutrient management education programs, and the effectiveness of the Manure Transportation Project.

In addition, the Department is required under §8-807 to report annually "..on the farm acreage covered by nutrient management plans and the implementation and evaluation of those plans". This report to the Governor and the General Assembly is due each year on December 31.

While Department would be willing to provide whatever meaningful information may be available, the time frames suggested by the analyst may not be particularly relevant. If the new law passes, it would not be effective until October 1, 2004. Establishing a November 1, 2004 deadline will not provide meaningful information by which to evaluate the status of program implementation or the Department's enforcement efforts. Such information would be available after February 1, 2005 and could be included within the existing reporting mechanisms..

COST EFFECTIVENESS OF NUTRIENT MANAGEMENT PLANNING VS. COVER CROPS

The comparison of nutrient reduction cost effectiveness of nutrient management plans and cover crops referred to by the analyst is incomplete. For nutrient management planning, the analyst only considered the cost of plan development, as represented by cost share data. There are additional issues to consider.

A nutrient management plan is only effective at reducing nutrient losses when it is implemented. As a regulatory program, the costs associated with regulatory monitoring and evaluation should also be considered as part of any cost effectiveness analysis. In addition, the public sector costs

of implementing the plan must also be considered. For farms with animals, this may include the costs of animal waste storage and handling systems as supported through cost share programs.

Incentives such as cost share are offered as a means to encourage the implementation of a practice considered to be beneficial. Without incentives, certain practices such as cover crops are not cost effective to the farmer and would not be implemented otherwise. Cover crops are not part of a regulatory structure and therefore are far less likely to be implemented without cost share support.

COVER CROP EFFICIENCY

The Joint Resolutions of 2001 related to cover crops were crafted by the Center for Agro-Ecology using data developed at the University of Maryland's Wye Research and Education Center. University of Maryland research estimates a reduction of direct nitrogen loss from the crop field of approximately 25 pounds for each of acre of cover crop planted.

The nitrogen reduction efficiency for cover crops used by the MDA is based on efficiencies applied in the US-Environmental Protection Agency (EPA) Chesapeake Bay Program watershed model. The EPA model is used to estimate progress of Bay states in achieving certain water quality restoration goals. The model applies practice specific efficiencies for all major practices implemented to reduce nitrogen and phosphorus loading to the Bay. In the case of cover crops, the efficiency estimates the reduction of nitrogen in the main stem of the Bay as a result of implementing cover crops on farm field in the watershed. The nitrogen reduction efficiency of 8.5 pounds is an average for Maryland and factors in the attenuation of nitrogen that occurs between the edge of field and the main stem of the Chesapeake Bay.

2. MOSQUITOES

Background

During the past four years mosquito control service in Maryland by MDA, in cooperation with 22 counties, has significantly increased. The number of communities requesting service has increased by more than 20 percent (from 1700 communities to 2100 communities). This increase is directly related to public concern over the introduction and spread of West Nile virus (WNV), a pathogen transmitted by the bite of a mosquito that is capable of causing severe neurological disease (and death) to people, livestock and wildlife. Prior to 1999, WNV was not known to exist in North America, but has since spread to all of the contiguous states and several Canadian provinces. The first human cases of illness caused by WNV in Maryland occurred in 2001, when 6 people were diagnosed with the disease. In 2002, there were 36 human cases of WNV illness in Maryland. In 2003, 73 human cases of WNV illness occurred in Maryland, the largest recorded outbreak of human disease from a mosquito-borne pathogen in Maryland. Also in 2003, 180 horses in Maryland were sickened by WNV. This is the largest equine outbreak of mosquito-borne disease in 60 years. Most predictions are that WNV will continue to affect Maryland for the next several years.

MDA has worked closely with the Department of Health and Mental Hygiene to develop a surveillance and management program for WNV to minimize the risk to public health. This

program has been active since 1999 and has been effective. Of the 115 human cases of WNV illness in Maryland since 2001, only 7 cases have occurred in communities which participated in MDA's recommended mosquito control program. In addition to comprehensive surveillance of mosquito population and for the virus, the MDA program includes aggressive mosquito control action. Recommended mosquito control activities include public education and increased use of insecticides to reduce the population of larval and adult mosquitoes before human disease occurs. These activities have greatly increased the cost of program operation. Surveillance costs alone have increased approximately 300 percent and now account for approximately $150,000 per year.

Due to the unusually wet summer of 2003 and the record number of cases of human and livestock illness, mosquito control spraying activities occurred at twice the normal level of activity. Nearly all of the FY 2004 funds allocated for employing contractual employees and purchasing insecticide were expended by the end of October, 2003.
Other Maryland agencies' activities have inadvertently increased the workload and expense for mosquito control by MDA as they have carried out their respective program mandates. Thousands of small wetlands have been created for storm water management sites, required by regulations of the Maryland Department of the Environment, in communities throughout Maryland. The State Highway Administration has created numerous mosquito breeding sites as a result of wetland mitigation efforts required by federal and state laws. The environmental value of these projects is not questioned, but there is a growing concern nationally and in Maryland that insufficient consideration is given to the mosquitoes produced in these created wetlands, particularly in view of the emerging public health problem of West Nile virus.

Why is MDA requesting a second airplane for mosquito control?
MDA instituted aerial spraying service for mosquito control in 1977. The service is primarily used on the Eastern Shore to suppress large infestations of mosquitoes that cannot be treated with ground based equipment. From 1977 through 1995, MDA contracted for aerial spraying services. For the most part, contractors provided good service, but the cost was high which limited the amount that could be done. Soon the available number of contractors dwindled, then the costs became even higher.

In 1996, an airplane (used, not new) was purchased by MDA and a pilot was hired to provide aerial spraying service for the mosquito control program. This action resulted in a tremendous cost saving for the state and counties participating in the aerial spraying program. The cost to provide spraying service with the state owned aircraft is at least three times less than comparable service from a contractor. The cost saving was illustrated in July, 2003 when the state aircraft was unavailable due to a mechanical problem and an emergency service contract was awarded for aerial spraying to suppress a large outbreak of mosquitoes on the lower Eastern Shore. The state aircraft costs $0.25 to $0.30 per acre to operate for adult mosquito control. This includes all costs; pilot salary and benefits, fuel, oil, insurance, hangar rent, repairs and maintenance; exclusive of pesticide. The contacted aircraft cost to the Department was $0.90 per acre, not including insecticide.

As a further example of the cost saving of the state owned aircraft, consider that the state of Delaware contacts for aerial spray service for mosquito control. The Delaware contract in 2003 provided a fee of $3.00 per acre, not including insecticide, to be paid to the contractor for adult mosquito control service.

The current state owned aircraft has served the state well. However, requests for aerial spraying service and the scope of the program have grown significantly since 1996, and the current aircraft can not meet the increased work load. This has resulted in greater downtime for repairs and could compromise flight safety unless a second aircraft is purchased soon. A larger aircraft, with greater load capacity and longer flight time capacity is needed to meet the current service load. This airplane purchase was actually authorized by both the Administration and the General Assembly 18 months ago. However, MDA delayed the initial purchase until late this Spring as a budget reduction strategy which pushed back our actual first installment payment to FY05. If funds for a second aircraft are deleted from our FY05 request, we would not be able to proceed with the publication of the bids which are now being drafted and reviewed by the state and the performance and safety of the mosquito control aerial spraying program may be compromised.

Impact of changing the cost sharing ratios with local jurisdictions

MDA policy has provided matching funds for local mosquito control projects since 1972. The ratio of **cost sharing has typically been 50 percent state funds and 50 percent county and /or community funds for all expenses related directly to providing local mosquito control**. These costs include insecticide, wages and benefits of contractual employees and certain classified employees, equipment operation, and other direct operating costs. **Counties and communities are not charged administrative fees or indirect costs.**

The Department of Agriculture's FY 2005 budget request for mosquito control includes $1,820,000 of general funds and $1,249,000 of special funds (revenue from participating jurisdictions). The FY 2005 general fund request is within the budget preparation guidelines issued by the Department of Management and Budget and is equivalent to the FY 2003 original appropriation. The FY 2005 special fund budget request is $385,000 (45%) greater than FY 2003 actual revenue, and $244,000 (24%) more than 2004 estimated revenue. The additional revenue from local jurisdictions in FY 2005 will be necessary to maintain an acceptable level of mosquito control service during a "normal" season. However, even with the additional revenue from local jurisdictions, it is anticipated that the FY 2005 budget request will not be sufficient to meet service demands if mosquito populations are above normal or West Nile virus continues to increase. The alternatives to requesting additional revenue from local jurisdictions in FY 2005 are to reduce mosquito control service or have an additional allocation of $400,000 general funds.

Participation in the mosquito control program is voluntary. It is possible that the higher cost to counties and communities for mosquito control service in FY 2005 may cause local jurisdictions to not renew their participation in the program.

3. GOVERNOR'S POULTRY INDUSTRY INITIATIVE

The Governor established a Poultry Issues Action Team by Executive Order on June 23, 2003 to assess the condition of the poultry industry in Maryland following the decision of Tyson Foods to close its processing facility in Berlin, affecting 600 employees and 155 local poultry farmers.

The Team completed its work and submitted a report with recommendations to the Governor. MDA can supply the Committee with copies of the report. The Team had 9 members, chaired by Joe Chisholm, a Pocomoke City farmer and banker. Other members included the Secretary of Agriculture, farmers, a county commissioner, a former banker, president of the Delmarva Poultry Industry Inc. and State Sen. Richard F. Colburn (R-District 37) and Delegate Rudolph C. Cane (D-District 37A).

- Team met with state officials, poultry company executives, representatives of environmental agencies and analysts of the U.S. poultry industry.
- Team provided 10 primary recommendations and 6 supplemental recommendations to the Governor by the Nov. 1, 2003 planned completion date.

The top recommendations of the Team were:

"The State should commit to requiring that land conservation programs be supportive of production agriculture and productive farmland. ***State programs should not in any way compete with production agriculture for farmland."***

MDA and the Department of Natural Resources have made changes to CREP (Conservation Reserve Enhancement Program) to focus incentives on areas providing the most water quality benefits while maintaining productive land for farming. USDA is in final stages of approving changes.

Maryland continues its strong support of farmland preservation, having provided more than $21 million in state bonds to farmland preservation in 2003. Easement offers went to 123 Maryland farmers with those funds when combined with federal and local monies.

Several recommendations detailed specific proposals to stimulate Maryland's agricultural economy in general and poultry farming in specific.

The Governor agreed to the need for encouraging investment in the agriculture industry and supporting the establishment of an agricultural finance authority "in the proper fiscal environment."

MDA is working with the Department of Business and Economic Development (DBED) to use existing economic development programs to benefit agriculture. Three local revolving loan funds will be restructured to allow the use of MEDAF grants to assist beginning and "socially disadvantaged" farmers interested in beginning new poultry enterprises.

Support for alternative uses of poultry manure, specifically the use of poultry litter as a power source at the Eastern Shore Correctional Institute.

The Governor created a multi-agency work group to explore potential for poultry waste as a fuel source for the production of electricity.

Involve poultry industry in development of the state's general permit for CAFOs.

Maryland Department of the Environment is seeking input from key agricultural groups regarding general permit requirements.

Commit to funding MDA's manure transport program at $500,000 annually.

Funds in the program ($390,000 in state and federal monies) are adequate to meet farmer demand. MDA will monitor farmer concerns and needs for this program

Conduct extensive analysis of MDA's Animal Health Program to ensure poultry disease outbreaks can be controlled.

MDA is conducting an analysis of the poultry health diagnostic laboratory in Salisbury and looking at the state's ability to work effectively with Delaware and Virginia to manage poultry industry health concerns.

MDA is working with Aberdeen-based Battelle Eastern Science and Technology Center to study the needs of the poultry industry and the ability of the state and federal government to contain any major disease outbreak.

MDA has successfully pursued federal funds to purchase advanced diagnostic equipment that will allow more timely identification of possible poultry health diseases.

Encourage state agencies involved in food procurement to develop strategies to increase the use of Maryland poultry and other agricultural products.

MDA's domestic marketing program is contacting other agencies to facilitate arrangements between farmers and state purchasers where feasible.

MDA and DBED should continue and step up efforts to identify foreign markets for Maryland poultry products and byproducts.

The Governor has asked MDA and DBED to continue efforts to aggressively market Maryland poultry and other agricultural products overseas.

State should pursue improving the rail infrastructure in Maryland to support the poultry industry.

The Department of Transportation and DBED will meet with poultry companies and railroads to identify ways to increase the efficiency and lower costs of transporting grain used for poultry feed.

Other recommendations not specifically addressed by the Governor were:

The State should address labor concerns of the poultry industry by increasing funding of community college programs designed to train truck drivers and commit to training other ag professionals, including veterinarians and farm laborers.

The State should devote staff to work with flock managers in promoting tree buffers around poultry farms.

The State should restore equitable funding to Maryland Cooperative Extension.

The State should invest $300,000 in a marketing campaign to promote the poultry industry.

The State should provide $175,000 annually to provide cost-share for on-farm grain storage.

4. HUMAN AND ENVIRONMENTAL IMPACTS OF ARSENIC IN CHICKEN LITTER

Some researchers have questioned the environmental and human health impacts of spreading chicken manure because the arsenic base ingredients present in chicken feed additives may present a health risk.. MDA has conducted a brief literature search and spoken with several scientists from both the University of Maryland and the University of Delaware to better understand what is know about this issue. The current consensus is that the arsenic content of poultry litter is similar to that found in background soils and therefore does not pose a risk.

The USGS released findings in 2001 of an ongoing study, "Reconnaissance for Arsenic in a Poultry Dominated Chesapeake Bay Watershed - Examination of Source, Transport, and Fate," which was conducted in the Pocomoke watershed. They found that total arsenic in agricultural and forest soils was 1-2m/kg. Concentrations of total dissolved arsenic in water samples from the Pocomoke River did not exceed 1.6ppb during base flow. (Current EPA standards allow 50ppb, although it was proposed in 2000 to change the standard to 5ppb). Shallow groundwater near agricultural fields did show dissolved arsenic concentrations as high as 23 ppb and aquifer levels from which drinking water could be drawn were 8ppb but findings indicate the latter to be a result of a natural source of iron rich sediments and not from an agricultural source.

USGS plans to continue research on arsenic and expand it to other tributaries in the Chesapeake Bay watershed with high density poultry populations to better understand the issue. MDA will try to keep abreast of their findings but we do not have the funds to support or expand the research.

5. SEAFOOD SALES DATA AND OYSTER AND CRAB HARVEST IMPACTS

The value of Maryland seafood products sales is derived from a survey conducted by the National Marine Fisheries Services (NMFS) office. The NMFS estimates the dockside value of the Maryland seafood catch. The dockside value is used to arrive at an estimate of the value of the catch in the wholesale market for raw and processed products. These derived estimates are based on multipliers provided by seafood economists. The value of seafood product sales may not reflect declines in the harvest of oysters and crabs due to changes in the market value of these commodities, and because of changes in the value and harvest of other seafood such as finfish

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